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Dirk Kempthorne, Governor Toni Hardesty, Director

October 27, 2005

## Certified Mail No. 7004 1160 0005 8739 4779

Victor Villanueva Environmental Safety & Health GModelo Agriculture, Inc. 5005 S. 15<sup>th</sup> West Idaho Falls, Idaho 83404

RE:

Facility ID No. 019-00050, GModelo Agriculture, Inc., Idaho Falls

**Final Permit Letter** 

Dear Mr. Villanueva:

The Idaho Department of Environmental Quality (DEQ) is issuing Permit to Construct (PTC) Number P-040526 for GModelo Agriculture, Inc., in accordance with IDAPA 58.01.01.200 through 228 (Rules for the Control of Air Pollution in Idaho).

This permit is based on your permit application received on December 14, 2004 and August 18, 2005. This permit is effective immediately. This permit does not release GModelo Agriculture, Inc., from compliance with all other applicable federal, state, or local laws, regulations, permits, or ordinances.

A representative of the Idaho Falls Regional Office will contact you regarding a meeting with DEQ to discuss the permit terms and requirements. DEQ recommends the following representatives attend the meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

Pursuant to IDAPA 58.01.23, you, as well as any other entity, may have the right to appeal this final agency action within 35 days of the date of this decision. However, prior to filing a petition for a contested case, I encourage you to call Dan Pitman at (208) 373-0502 to address any questions or concerns you may have with the enclosed permit.

Sincerely,

Martin Bauer, Administrator

Martin Bare

Air Quality Division

MB/DM/sd Enclosures Permit No. P-040526



# Air Quality PERMIT TO CONSTRUCT

# State of Idaho Department of Environmental Quality

**PERMIT NO.: P-040526** 

**FACILITY ID NO.:** 019-00050

AQCR: 61

CLASS: SM∂O

SIC: 2083

**ZONE**: 12

**UTM COORDINATE (km):** 414.5, 4,811.3

1. PERMITTEE

GModelo Agriculture, Inc.

2. PROJECT

**Barley Malting Plant** 

3. MAILING ADDRESS 5005 South 15 <sup>th</sup> West	CITY Idaho Falls	STATE Idaho	ZIP 83404		
4. FACILITY CONTACT Victor Villanueva	TITLE Environment, Safety & Health	<b>TELEPHONE</b> (208) 552-5540			
5. RESPONSIBLE OFFICIAL Luis Miguel Alvarez  TITLE Vice President		<b>TELEPHONE</b> (208) 552-5540			
6. EXACT PLANT LOCATION 5005 South 15th West		COUNTY Bonneville			

# 7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS Barley malting

#### 8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.200, et seq.

TONI HARDESTY, DIRECTOR

**DEPARTMENT OF ENVIRONMENTAL QUALITY** 

DATE ISSUED:

October 27, 2005

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# Acronyms, Units, and Chemical Nomenclature

**AQCR** Air Quality Control Region Code of Federal Regulations **CFR** 

CO carbon monoxide

Department of Environmental Quality DEQ

dry standard cubic feet dscf dry standard cubic meter dscm

U.S. Environmental Protection Agency **EPA** 

grain (1 lb = 7,000 grains) gr

a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act **IDAPA** 

lb/hr pound per hour

million standard cubic feet MMscf

 $NO_{x}$ nitrogen oxides

**NSPS** New Source Performance Standards operations and maintenance manual O&M

PM particulate matter

particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers  $PM_{10}$ 

**PTC** permit to construct

Rules Rules for the Control of Air Pollution in Idaho

standard cubic feet scf

Standard Industrial Classification SIC

T/yr tons per year

**UTM** Universal Transverse Mercator

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Location:	Idaho Falis	019-00050	Date Issued:	October 27, 2005		

# 1. PERMIT TO CONSTRUCT SCOPE

# **Purpose**

- 1.1 This PTC modification is to clarify performance testing requirements for NSPS-affected and non-affected emissions units and to correct the phosphine usage limitation in the permit.
- 1.2 This PTC replaces PTC No. P-030510, issued February 23, 2004, the terms and conditions of which no longer apply.

# **Regulated Sources**

Table 1.1 lists all sources of regulated emissions in this PTC.

# **Table 1.1 REGULATED EMISSIONS SOURCES**

Permit Section	Source Description	Emissions Control(s)
2	Barley receiving pit, drag conveyer, and elevator	Baghouse 5101
2	Barley pre-cleaning system	Baghouse 5102
2	Barley grading machines	Baghouse 5103
2	Conveyance to barley storage silos	Baghouse 5103
2	Conveyance to waste products storage bin	Baghouse 5103
2	Byproducts loadout	Baghouse 5104
2	Conveyance to malting plant	Water sprays on conveyors
2	Steeping	None – wet process
2	Germinating	None – wet process
2	Kilning	None – vented through roof of Malt Building
2	Conveyance to malt-in-culms storage	Baghouse 5105
2	Malt-in-culms storage	Baghouse 5105
2	Conveyance to deculmer systems	Baghouse 5106
2	Deculmers	Baghouse 5106
2	Destoners	Baghouse 5107
2	Final cleaning	Baghouse 5108
2	Rail and truck loading	Baghouse 5109
2	Manual vacuum system	Baghouse 5201 followed by HEPA filter
3	Four each ~ 75 MMBtu/hr natural gas-fired boilers	low-NO <sub>x</sub> burners
3	160 BHP diesel-fired emergency fire water pump	None

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# 2. GRAIN/MALT HANDLING AND STORAGE AND MALT PRODUCTION

#### 2.1 Process Description

The primary purpose of the grain/malt handling process is unloading, handling, cleaning, storage and loading of barley, malt, and byproducts.

The primary purpose of the malt production process is to change the barley into malt.

## 2.2 Emissions Control Description

Particulate emissions generated from the operation of the grain/malt handling process are controlled by baghouses and/or enclosures as indicated in Table 2.1 below.

Table 2.1 GRAIN/MALT HANDLING & STORAGE CONTROL DESCRIPTION

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Barley reception pit and conveyance	Partial enclosure and baghouse 5101	Receiving building openings and baghouse 5101 stack
Pre-cleaned barley storage	Partial enclosure	Silo vents
Barley pre-cleaning	Baghouse 5102	Baghouse 5102 stack
Barley grading	Baghouse 5103	Baghouse 5103 stack
Malting barley storage	Baghouse 5103	Baghouse 5103 stack
Malt conveyance and malt-in-culms storage	Baghouse 5105	Baghouse 5105 stack
Malt deculmer and destoner system 1	Baghouse 5106	Baghouse 5106 stack
Malt deculmer and destoner system 2	Baghouse 5107	Baghouse 5107 stack
Malt grading and cleaning	Baghouse 5108	Baghouse 5108 stack
Malt storage	Partial enclosure	Silo vents
Byproducts hoppers	Partial enclosure	Hopper vents
Malt loadout	Baghouse 5109	Baghouse 5109
Byproducts loadout	Baghouse 5104, partial enclosure	Baghouse 5104 stack
Manual vacuum cleaning system	Baghouse 5201 and HEPA filter	Baghouse 5201 vent

Emissions from the malting process are uncontrolled. The kilns in the process are heated indirectly using hot water heat exchangers so there are not any combustion products associated with the malting process. Equipment associated with the malt production process is identified below in Table 2.2.

**Table 2.2 MALTING PROCESS CONTROL DESCRIPTION** 

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Steeping vessels	None	No regulated air pollutant emissions
Germinating vessels	None	No regulated air pollutant emissions
6 Drying kilns	None	Kiln vents K-1 and K-2

#### **Emissions Limits**

## 2.3 Particulate Matter Emission Limits

2.3.1 The PM and PM<sub>10</sub> emissions from the grain/malt handling and storage emissions stacks shall not exceed any corresponding emissions rate limits listed in Table 2.3.

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Table 2.3 GRAIN/MALT HANDLING AND STORAGE EMISSIONS LIMITS"

Source	P	PM		M <sub>10</sub>
Description	lb/hr	T/yr	lb/hr	T/yr
Baghouse 5101	1.19	5.22	1.19	5.22
Baghouse 5102	1.19	5.22	1.19	5.22
Baghouse 5103	1.19	5.22	1.19	5.22
Baghouse 5104	0.4	1.74	0.4	1.74
Baghouse 5105	0.2	0.87	0.2	0.87
Baghouse 5106	1.19	5.22	1.19	5.22
Baghouse 5107	1.19	5.22	1.19	5.22
Baghouse 5108	1.19	5.22	1.19	5.22
Baghouse 5109	0.13	0.58	0.13	0.58
Baghouse 5201	0.04	0.19	0.04	0.19

The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

2.3.2 The PM and PM<sub>10</sub> emissions from the kilns shall not exceed any corresponding emissions rate limits listed in Table 2.4.

Table 2.4 MALTING PROCESS EMISSIONS LIMITS'

Source	Р	PM		M <sub>10</sub>
Description	lb/hr	T/yr	lb/hr	T/yr
Kiln vent K-1	2.8	12.3	2.6	11.4
Kiln vent K-2	2.8	12.3	2.6	11.4

The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

## 2.4 Phosphine Emission Limit

The total phosphine emissions from all barley and malt silos shall not exceed 11.3 lb/day.

# 2.5 NSPS Standards for Particulate Matter (40 CFR 60.300)

Affected facilities or emissions units under 40 CFR 60.300 are each truck, barge, ship, or railcar unloading or loading station; each grain dryer; and all grain handling operations. 40 CFR 60.300 does not apply to emissions units handling only malted barley because it is not considered grain.

In accordance with 40 CFR 60.302.a, particulate matter emissions from any column or rack dryer shall not exceed greater than 0% opacity.

In accordance with 40 CFR 60.302.b, emissions from truck unloading stations, truck loading stations, railcar loading stations, railcar unloading stations and all grain handling operations shall not exceed the following:

- 1) 0.01 grains of particulate matter per dry standard cubic foot.
- 2) 0% opacity.

In accordance 40 CFR 60.302.c the following standards shall apply:

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- (1) Any individual truck unloading station, railcar unloading station, or railcar loading station shall not exhibit greater than 5% opacity.
- (2) Any grain handling operation shall not exhibit greater than 0% opacity.
- (3) Any truck loading station shall not exhibit greater than 10% opacity.

#### 2.6 Opacity Limit (IDAPA 58.01.01.625)

Emissions from any stack, vent, or other functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required in IDAPA 58.01.01.625. Opacity shall be determined using the procedures contained in IDAPA 58.01.01.625. Compliance with this limitation shall be determined using the methods and procedures contained in Permit Condition 2.17.

#### 2.7 Malt Building Visible Emissions Limits

Visible emissions shall not be observed leaving the malt building at any time. Visible emissions are determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by a DEQ-approved alternative method.

# Operating Requirements

# 2.8 Phosphine Usage Limits

The maximum daily usage of phosphine shall not exceed 11.3 pounds per day based on a combination of tablets and pellets used per day. Phosphine shall only be used inside barley or malt storage silos.

#### 2.9 Phosphine Work Practice Plan

The permittee shall develop a work practice plan for the storage, application, aeration, and disposal of phosphine containing chemicals as recommended by the manufacturer of phosphine-containing material.

#### 2.10 Baghouse Pressure Drop

The pressure drop across each baghouse shall be maintained within O&M manual specifications and shall not exceed  $\pm 40\%$  of the average pressure drop attained during the most recent performance test which demonstrates compliance with the applicable emission limit. Documentation of the operating pressure drop specifications for each baghouse shall remain onsite at all times, and shall be made available to DEQ representatives upon request.

## 2.11 Baghouse Specifications

The baghouse specifications shall be recorded at the time of the initial performance test and the baghouses shall be operated with the same specifications as the most recent DEQ approved performance test:

- Baghouse type (reverse air, pulse jet, shaker)
- Number and size of bags

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- Bag fabric type
- Air to cloth ratio

#### 2.12 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent PM from becoming airborne as required in IDAPA 58.01.01.651. In determining what is reasonable, consideration will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of PM. Some of the reasonable precautions include, but are not limited to, the following:

- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings
  or structures, construction operations, the grading of roads, or the clearing of lands.
- Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of dirt roads, material stockpiles, and other surfaces which can create dust.
- Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
- Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne
  dusts.
- Paving of roadways and their maintenance in a clean condition, where practical.
- Prompt removal of earth or other stored material from streets, where practical.

## 2.13 Throughput Limits

The maximum daily throughput of the drying kilns shall not exceed a total of 484 short tons of malt per day. The maximum annual throughput of the drying kilns shall not exceed 165,000 tons per any consecutive 12-month period.

# Monitoring and Recordkeeping Requirements

#### 2.14 NSPS Performance Testing

Performance tests shall be conducted on each affected unit under 40 CFR 60.300 (emissions units handling or processing only malted barley are not affected) to demonstrate compliance with the particulate matter standards of 40 CFR 60.302 in accordance with 40 CFR 60.303, IDAPA 58.01.01.157 and the following:

- Visible emissions shall be observed during each performance test run using the methods specified by IDAPA 58.01.01.625 and EPA Reference Method 9 and 40 CFR 60.11.
- If testing is conducted on a baghouse, the static pressure drop across the baghouse shall be monitored and recorded during each performance test. The pressure drop shall be recorded a minimum of four times per run at evenly spaced intervals.
- The throughput to each process shall be recorded in pounds per hour or tons per hour during each performance test. The throughput shall be recorded a minimum of four times per run at evenly spaced intervals.

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# 2.15 Malt Kiln PM<sub>10</sub> Performance Test

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct performance tests to measure PM<sub>10</sub> emissions from the kiln vents K-1 and K-2 using EPA Reference Methods 5 and 202, or DEQ approved alternative. The total PM catch (filterable and condensible) shall be considered PM<sub>10</sub> unless the permittee chooses to also conduct tests using EPA Methods 201 and 202. This initial compliance test, and any subsequent compliance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, General Provision 2 of this permit, and the following requirements:

- Visible emissions shall be observed during each compliance test run using the methods specified in IDAPA 58.01.01.625 and EPA Method 9.
- Emissions from vents K-1 and K-2 shall be tested simultaneously.
- The throughput of malt to the kilns shall be recorded in pounds per hour or tons per hour during each performance test.

#### 2.16 **Phostoxin Usage Monitoring**

Each day, the permittee shall monitor and record the number of tablets and pellets of Phostoxin used and calculate the phosphine emissions in pounds per day based on the following:

- (1) 0.2 gram of phosphine gas per 0.6 gram pellet; and
- (2) 1.0 gram of phosphine gas per three gram tablet.

The total grams emitted per day shall be divided by 453.6 to determine the total pounds phosphine emitted per day. Used shall mean the tablets or pellets are removed from the packaging and exposed to air. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

#### 2.17 **Opacity Monitoring (IDAPA 58.01.01.625)**

The permittee shall conduct a monthly inspection of each emissions point during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each monthly visible emission inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

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## 2.18 Monitor Operating Parameters

The permittee shall monitor and record the pressure drop across each baghouse on a daily basis. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request.

# 2.19 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed and submitted to DEQ an O&M manual for all baghouses. The manual shall describe the procedures that will be followed to comply with General Provision 2, Permit Condition 2.10, and the manufacturer specifications. This manual shall also contain all specifications for each baghouse as required by Permit Conditions 2.10 and 2.11. A copy of this manual shall also remain onsite at all times.

#### 2.20 Fugitive Dust Monitoring

The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive emission inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

#### 2.21 Kiln Throughput Monitoring

Each day, the permittee shall monitor and record the amount of malt throughput to the kilns. Each month, the permittee shall monitor and record the total throughput to the kilns for that month and for the most recent 12-month period. A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEO representatives upon request.

## Reporting Requirements

## 2.22 Performance Test Protocol

The permittee is encouraged to submit a test protocol to DEQ for approval at least 30 days prior to performance tests conducted to comply with Permit Conditions 2.14 and 2.15. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the test does not satisfy the testing requirements.

# 2.23 Performance Test Report

The permittee shall submit a report of the results of the performance test(s) specified in Permit Conditions 2.14 and 2.15, including all required process data, to DEQ within 30 days after the date on which the stack sampling is concluded.

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# 2.24 Reporting Procedures

All reports required by this permit, i.e. performance test reports, test protocols, O&M manuals, etc., shall be certified by the facility responsible official and submitted to the DEQ regional office at the following address:

Air Quality Permit Compliance Department of Environmental Quality Idaho Falls Regional Office 900 N. Skyline, Suite B Idaho Falls, Idaho 83402

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## 3. UTILITIES OPERATIONS

#### 3.1 Process Description

The primary purpose of the utilities operations is to provide heat and power to the plant. The utilities operations process consists of four 75 MMBtu/hr heat input natural gas-fired boilers located in the power house and 160 BHP diesel-fired emergency fire water pump.

# 3.2 <u>Emissions Control Description</u>

The four natural gas-fired boilers are equipped with low-NO<sub>x</sub> burners. The boilers are listed below in Table 3.1.

**Table 3.1 UTILITIES OPERATONS DESCRIPTION** 

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
B-8040, 75 MMBtu/hr natural gas-fired boiler	Low-NO <sub>x</sub> burner	B-8040 stack
B-8045, 75 MMBtu/hr natural gas-fired boiler	Low-NO <sub>x</sub> burner	B-8045 stack
B-8050, 75 MMBtu/hr natural gas-fired boiler	Low-NO <sub>x</sub> burner	B-8050 stack
B-8055, 75 MMBtu/hr natural gas-fired boiler	Low-NO <sub>x</sub> burner	B-8055 stack
Emergency firewater pump, 160 BHP	none	ENG-1, pump exhaust stack

#### **Emissions Limits**

#### 3.3 <u>Boiler Emissions Limits</u>

The PM,  $PM_{10}$ ,  $NO_x$ , and CO emissions from the B-8040, B-8045, B-8050, B-8055 stacks shall not exceed any corresponding emissions rates limits in Table 3.2. Annual emissions limits for the boilers are aggregated. Hourly emission limits are for individual boilers. The ENG-1 stack shall not exceed any corresponding emissions rate limits listed in Table 3.2.

**Table 3.2 UTILITIES OPERATIONS EMISSIONS LIMITS** 

Source	P	PM		PM <sub>10</sub>		NO <sub>x</sub>		CO	
Description	lb/hr	Т/уг	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	
B-8040	0.57		0.57		3.00		6.30		
B-8045	0.57		0.57	] _ [	3.00	]	6.30	<b>1</b>	
B-8050	0.57	7.5	0.57	7.5	3.00	39.4	6.30	82.8	
B-8055	0.57		0.57		3.00	1	6.30	]	
ENG-1		0.01				0.44		0.04	

#### 3.4 Opacity Limit

Emissions from any other stack, vent, or functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625, Rules for the Control of Air Pollution in Idaho. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

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# **Operating Requirements**

# 3.5 Boiler Fuel Type

Boilers B-8040, B-8045, B-8050, and B-8055 shall be fired on natural gas exclusively.

#### 3.6 Boiler Natural Gas Usage Limits

The maximum daily usage of natural gas for all boilers shall not exceed 7,200,000 standard cubic feet per day. The maximum annual usage of natural gas for all boilers shall not exceed 1,971,000,000 standard cubic feet per any consecutive 12-month period.

# 3.7 Boiler Low-NO, Combustion Control

Boilers B-8040, B-8045, B-8050, and B-8055 shall be equipped with low-NO<sub>x</sub> burners that are certified by the manufacturer to emit less than 40 pounds NO<sub>x</sub> per million standard cubic feet of natural gas combusted.

#### 3.8 Firewater Pump Hours of Operation Limits

The maximum annual hours of operation of the ENG-1 emergency firewater pump shall not exceed 500 hours per any consecutive 12-month period.

#### 3.9 Fuel Oil Sulfur Content

The sulfur content in the No. 2 fuel oil (ASTM Grade 2) supplied to the ENG-1 emergency firewater pump shall not exceed 0.5% by weight as required in IDAPA 58.01.01.728.

# Monitoring and Recordkeeping Requirements

#### 3.10 Low-NO, Combustion Control

The permittee shall maintain documentation of the manufacturers certified emission rate for the low-NO<sub>x</sub> burners on boilers B-8040, B-8045, B-8050, and B-8055 for the life of the boilers. This documentation shall remain onsite at all times and shall be made available to DEQ representatives upon request.

#### 3.11 Performance Test

Within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial startup, the permittee shall conduct performance tests to measure carbon monoxide emissions from boilers B-8040 and B-8050 using EPA Reference Method 10. The compliance tests shall be used to demonstrate that the actual CO emissions from the natural gas-fired boilers are less than or equal to the hourly CO emissions limits in Permit Condition 3.3.

These initial performance tests, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, General Provision 2 of this permit, and the following requirements:

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- Visible emissions shall be observed during each compliance test run using the methods specified in IDAPA 58.01.01.625.
- The throughput of natural gas to each boiler shall be monitored, or calculated, and recorded in standard cubic feet per hour during each performance test.

# 3.12 Monitor Operating Parameters

A compilation of the most recent two years of records shall be kept onsite and shall be made available to DEQ representatives upon request. The permittee shall monitor and record the following:

## 3.12.1 Standard NSPS Fuel Usage Monitoring and Recordkeeping

- In accordance with 40 CFR 60.48c(g), or EPA approved alternative, the owner or operator of each affected facility shall record and maintain records of the amounts of each fuel combusted during each day. If an EPA approved alternative is used the permittee shall send a copy of the EPA approval to DEO.
- In accordance with 40 CFR 60.48c(i), or EPA approved alternative, the owner or operator of the affected facility shall maintain all records for a period of two years following the date of such record. If an EPA approved alternative is used the permittee shall send a copy of the EPA approval to DEQ.

#### 3.12.2 Natural Gas Throughput Limitation Compliance Demonstration

The permittee shall use the natural gas throughput information required in Permit Condition 3.12.1 and shall record the throughput of natural gas to the boilers in million cubic feet per day and million cubic feet per any consecutive 12-month period to demonstrate compliance with Permit Condition 3.6. The total fuel usage for the previous consecutive 12-month period shall be updated and recorded monthly.

#### 3.12.3 Emergency Firewater Pump Operating Hours

The hours of operation of the emergency firewater pump in hours per month and hours per any consecutive 12-month period.

#### 3.13 <u>Fuel Oil Sulfur Content Monitoring</u>

The permittee shall maintain documentation of the actual fuel sulfur content, in percent by weight, for each shipment of distillate fuel oil received.

## Reporting Requirements

## 3.14 Performance Test Protocol

The permittee is encouraged to submit a test protocol to DEQ for approval at least 30 days prior to the performance test required in Permit Condition 3.11.

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# 3.15 Performance Test Report

The permittee shall submit a report of the results of the performance test required in Permit Condition 3.11, including all required process data, to DEQ within 30 days after the date on which the stack sampling is concluded.

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## 4. SUMMARY OF EMISSIONS LIMITS

Table 4.1 provides a summary of all emissions limits required by this permit:

**Table 4.1 SUMMARY OF EMISSIONS LIMITS** 

		GMo	delo Agric	ulture Inc.,	Idaho Fall	s			
	E	missions Li	mits* – Hot	ırly (lb/hr)	and Annua	el <sup>b</sup> (T/yr)	ı		
Source	F	M	PM <sub>10</sub> <sup>c</sup>		NO <sub>X</sub>		со		Phosphine
Description	lb/hr	T/yr	lb/hr	T/yr					lb/day
Kiln vent K-1	2.8	12.3	2.6	11.4					
Kiln vent K-2	2.8	12.3	2.6	11.4					
Baghouse 5101	1.19	5.22	1.19	5.22					
Baghouse 5102	1.19	5.22	1.19	5.22					
Baghouse 5103	1.19	5.22	1.19	5.22					
Baghouse 5104	0.4	1.74	0.4	1.74					
Baghouse 5105	0.2	0.87	0.2	0.87					
Baghouse 5106	1.19	5.22	1.19	5.22					
Baghouse 5107	1.19	5.22	1.19	5.22					
Baghouse 5108	1.19	5.22	1.19	5.22					
Baghouse 5109	0.13	0.58	0.13	0.58					
Baghouse 5201	0.04	0.19	0.04	0.19					
Silo vents									11.3
	lb/hr	T/yr <sup>d</sup>	lb/hr	T/yr <sup>d</sup>	lb/hr	T/yr <sup>d</sup>	lb/hr	T/yr <sup>d</sup>	
B-8040, 75 MMBtu natural gas-fired boiler	0.57		0.57		3.00		6.30		
B-8045, 75 MMBtu natural gas-fired boiler	0.57	]	0.57	]	3.00	30.4	6.30		
B-8050, 75 MMBtu natural gas-fired boiler	0.57	7.5	0.57	7.5	3.00	39.4	6.30	82.8	
B-8055, 75 MMBtu natural gas-fired boiler	0.57		0.57		3.00		6.30		
ENG-1, Emergency firewater pump, 160 BHP		0.01				0.44		0.04	

As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in this permit analysis.

As determined by multiplying the actual or allowable (if actual is not available) pound-per-hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates. The permittee shall not exceed the T/yr listed based on any consecutive 12-month period.

c Includes condensibles.

d Annual emissions are aggregated for all four natural gas-fired boilers.

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# 5. EMISSIONS INVENTORY

The following table is a summary of the emissions increases and decreases associated with this permit. The emissions inventory table is provided for informational purposes only.

**Table 5.1 EMISSIONS INVENTORY** 

Pollutant	Annual Emissions Increase (T/yr)	Annual Emissions Decrease (T/yr)	Change in Annual Emissions (T/yr)
NO <sub>x</sub>	39.8		39.8
SO <sub>2</sub>	0.6		0.6
СО	82.8		82.8
PM/PM <sub>10</sub>	65.1		65.1
voc	5.5		5.5
TAPS/ HAPS*	5		5
Total:	198.8		198.8

<sup>\*</sup>TAPS/HAPS = toxic air pollutants / hazardous air pollutants

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#### 6. PERMIT TO CONSTRUCT GENERAL PROVISIONS

- 1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq., and the permittee is subject to penalties for each day of noncompliance.
- 2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
- 3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
  - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
  - At reasonable times, to have access to and copy any records required to be kept under the terms and
    conditions of this permit, to inspect any monitoring methods required in this permit, and require
    stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the
    Director.
- 4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- 5. The permittee shall notify DEQ, in writing, of the required information for the following events within five working days after occurrence:
  - Initiation of Construction Date
  - Completion/Cessation of Construction Date
  - Actual Production Startup Date
  - Initial Date of Achieving Maximum Production Rate Production Rate and Date
- 6. If compliance testing is specified, the permittee must schedule and perform such testing within 60 days after achieving the maximum production rate, and not later than 180 days after initial startup. This requirement shall be construed as an ongoing requirement. The permittee shall not operate the source without testing within 180 days. If testing is not conducted within 180 days after initial startup, then each day of operation thereafter without the required compliance test constitutes a violation. Such testing must strictly adhere to the procedures outlined in IDAPA 58.01.01.157 and shall not be conducted on weekends or state holidays without prior written approval from DEQ. Testing procedures and specific time limitations may be modified by DEQ by prior negotiation if conditions warrant adjustment. DEQ shall be notified at least 15 days prior to the scheduled compliance test. Any records or data generated as a result of such compliance test shall be made available to DEQ upon request.

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7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.